

# INTERNATIONAL SEARCH REPORT

PCT/EP2004/014669

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 H04L25/03

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H04B H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| P,X        | EP 1 453 223 A (FUJITSU LIMITED)<br>1 September 2004 (2004-09-01)<br>abstract<br>page 2<br>claim 1<br>figures 1,2,7   | 1-30                  |
| X          | & WO 03/049322 A (FUJITSU LIMITED;<br>JITSUKAWA, DAISUKE; SEKI, HIROYUKI)<br>12 June 2003 (2003-06-12)  | 1                     |
| A          |   | 2-30                  |
| X          | "UNIVERSAL MOBILE TELECOMMUNICATIONS<br>SYSTEM (UMTS); PHYSICAL LAYER<br>PROCEDURES (FDD) (3GPP TS 25.214 VERSION<br>3.4.0 RELEASE 1999)"<br>September 2000 (2000-09), ETSI TS 125 214<br>V3.4.0, PAGE(S) 1-48, XP002166612 | 1                     |
| A          | page 31 - page 38   | 2-30                  |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

### \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
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- "P" document published prior to the international filing date but later than the priority date claimed

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- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

3 May 2005

Date of mailing of the international search report

27/05/2005

Name and mailing address of the ISA

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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |  |                       |
|--|--|-----------------------|
| Category °   | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X  | US 2003/185310 A1 (KETCHUM JOHN W ET AL)<br>2 October 2003 (2003-10-02)            | 1                     |
| A  | abstract<br>claims 1-44<br>figure 1  | 2-30                  |
| X  | -----<br>WO 99/57820 A (ARRAYCOMM, INC)<br>11 November 1999 (1999-11-11)           | 1                     |
| A  | abstract<br>claims 1-51  | 2-30                  |
| A  | -----<br>US 2003/224750 A1 (SAMPATH HEMANTH)<br>4 December 2003 (2003-12-04)       | 1-30                  |
|  | abstract<br>claims 1-20<br>-----   |                       |

# INTERNATIONAL SEARCH REPORT

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| Patent document<br>cited in search report |    | Publication<br>date |    | Patent family<br>member(s) | Publication<br>date |
|---|----|---------------------|----|----------------------------|---------------------|
| EP 1453223                                | A  | 01-09-2004          | WO | 03049322 A1                | 12-06-2003          |
|   |    |                     | EP | 1453223 A1                 | 01-09-2004          |
|   |    |                     | US | 2005014474 A1              | 20-01-2005          |
| WO 03049322                               | A  | 12-06-2003          | WO | 03049322 A1                | 12-06-2003          |
|   |    |                     | EP | 1453223 A1                 | 01-09-2004          |
|   |    |                     | US | 2005014474 A1              | 20-01-2005          |
| US 2003185310                             | A1 | 02-10-2003          | AU | 2003223328 A1              | 13-10-2003          |
|   |    |                     | CA | 2480169 A1                 | 09-10-2003          |
|   |    |                     | EP | 1488585 A2                 | 22-12-2004          |
|   |    |                     | WO | 03084092 A2                | 09-10-2003          |
| WO 9957820                                | A  | 11-11-1999          | AU | 3757399 A                  | 23-11-1999          |
|   |    |                     | CN | 1507168 A                  | 23-06-2004          |
|   |    |                     | CN | 1507169 A                  | 23-06-2004          |
|   |    |                     | CN | 1507170 A                  | 23-06-2004          |
|   |    |                     | CN | 1308794 A                  | 15-08-2001          |
|   |    |                     | EP | 1376891 A2                 | 02-01-2004          |
|   |    |                     | EP | 1376892 A2                 | 02-01-2004          |
|   |    |                     | EP | 1376893 A2                 | 02-01-2004          |
|   |    |                     | EP | 1513271 A2                 | 09-03-2005          |
|   |    |                     | EP | 1078476 A1                 | 28-02-2001          |
|   |    |                     | JP | 2002514033 T               | 14-05-2002          |
|   |    |                     | WO | 9957820 A1                 | 11-11-1999          |
|   |    |                     | US | 2002155818 A1              | 24-10-2002          |
|   |    |                     | US | 2003050016 A1              | 13-03-2003          |
|   |    |                     | US | 2003032423 A1              | 13-02-2003          |
|   |    |                     | US | 6615024 B1                 | 02-09-2003          |
|   |    |                     | US | 2004127260 A1              | 01-07-2004          |
| US 2003224750                             | A1 | 04-12-2003          | AU | 2003238811 A1              | 19-12-2003          |
|   |    |                     | EP | 1508231 A1                 | 23-02-2005          |
|   |    |                     | WO | 03103247 A1                | 11-12-2003          |